Trustee Response to Comments of the Responsible Party Lost Use Valuation Report

October 10, 2006

The following presents the response of the Natural Resource Trustees for the *Athos I* oil spill assessment to the comments of the responsible party, dated April 7, 2006. Responses are presented according the numbered sections contained in the original comments.

- The Trustees believe that the use of information reported by survey respondents regarding the effects of the oil spill on their recreational activity is a valid basis for the estimation of spill-related losses. Similar methods have been used in past and ongoing oil spill assessments. Importantly, there is corroborating evidence in the Athos I assessment to support the validity of the method. In particular, losses to recreational hunting are calculated in the same manner as losses to recreational fishing. In other words, losses are calculated based on the reduction in recreation trips due to the spill as reported by respondents to the hunting survey. An alternative method for calculating the decline in hunting trips is also possible using data from the U.S. Fish and Wildlife Service, as described on pages B-5 and B-6 of the valuation report. By comparing the average number of trips taken to the six-county spill assessment area in previous years to the number of trips taken in the year of the spill, a decline in trips of 6,180 is estimated. This figure is based on annual reporting that is unrelated to the spill assessment. The figure would account for lost trips not taken to the Delaware River, but would only account for a portion of substitute trips since substitution can occur within the six-county area. This alternative estimate should therefore fall above the Trustee assessment estimate of lost trips but below the assessment estimate of lost and substitute trips combined. The number of lost trips calculated in the assessment was 4,700 and the total number of lost and substitute trips combined was 7,686. The alternative estimate of lost trips falls within the expected range. This supports the validity of the methods applied in the lost use valuation report.
- 2. The estimation of damages in the draft report of March 9, 2006 relied on information from two survey waves. Wave 1 was conducted in June 2005 and Wave 2 was conducted in August 2005. Results based solely on the Wave 1 survey have not been estimated, however, results from a single survey wave may differ from the combined results of two survey waves due to statistical variation. This is particularly true for any one area within the geographic coverage of the survey. In order to address any uncertainty with regard to results for the Delaware portion of the survey, an additional Wave 3 survey was conducted in May, 2006. An additional 51 observations were collected from sites in New Castle County, and the revised report presents the combined results of the three survey waves.

3. The estimate of losses to recreational fishing in period 3 was based on the percentage loss estimated in the August 2005 survey. This was determined to be a reasonable approach to estimating period 3 losses for several reasons. First, results in table A3-3 indicate that 81 percent of those affected by the spill at any time during the season continued to be affected at the time of the August survey. While the percentage of people affected is not the same as the percentage of affected trips, this figure is relevant to period 3 because it represents a measure of effects immediately prior to period 3. Second, fishing surveys undertaken in May of 2006 indicated that 32 percent of respondents continued to perceive that conditions had not returned to normal. This suggests that losses to recreational fishing may have been ongoing at that time. Since no losses were calculated for 2006, any overestimation of losses in period 3 of 2005 may be offset by the underestimation of losses for 2006. Third, a more precise estimate of losses for period 3 would have required additional survey effort near the end of the recreational fishing season. Obtaining a significant number of additional responses becomes more difficult as fishing activity declines late in the season. Given these factors, the use of data from the August 2005 survey to estimate losses for the remainder of the season was determined to be a reasonable approach.